

α v	β 8	C6D4 VH	C6D4 VL
E121			R33
D148			R33
D218			R35
	H118		Y55
	D171		W56
	N173		K95
	N173		S97
	D175	S33	
	D175	R50	
	K203	D31	

Table S1 Interactions of α v β 8 with Fab C6D4, related to Fig. 2

α v	β 8	C6-RGD3 VH	C6-RGD3 VL
D148			R32
F177			R37
	D171		W60
	N173		K99
	N173		S101
	N173	Y101	
	R201	T28	
	Q202	R103	
	K203	D31	
	I204	Y100	
	Mg ²⁺ (MIDAS)		D34

Table S2 Interactions of α v β 8 with Fab C6-RGD3, related to Fig. 2

C6-RGD3			W2			W3			W3			W4		
C6D4			L ₁			L ₁			L ₁			L ₁		
α_v	119	KQEREP	α_v	146	DIDADG	α_v	175	GSFYWQ	α_v	210	TRTAQAIFDDSY			
α_8	124	TPEKDP	α_8	153	NADPEG	α_8	182	GSFYWQ	α_8	217	TEVAPASYDDSY			
α_5	126	EPLSDP	α_5	155	FSWAAG	α_5	184	GSYFWQ	α_5	219	TRQASSIYDDSY			
α_{iib}	121	EAEKTP	α_{iib}	160	FSWDKR	α_{iib}	187	GGYYFL	α_{iib}	223	FDSSNPEYFDGY			

α_v subunit interactions with L-TGF- β , C6D4, and C6-RGD3

= conserved

Table S3 C6D4, C6-RGD3, L-TGF- β 1 interactions with α_v subunit β -propeller blades W2, W3, W4 aligned to other α -subunits, related to Fig. 2

pL-TGF- β 1 ^a	192	AHCSCDSKDNT-----LHVEING---FNSGRGDLATIHG-----MNRP
hL-TGF- β 1 ^b	192	AHCSCDSRDNT-----LQVDING---FTTGRRGDLATIHG-----MNRP
hL-TGF- β 3	202	IHCPCHTFQPNGD-ILENIHEVMEIKFKGVDNEDDHGRGDLGRLKK---QKDHHNP
hL-TGF- β 2	204	LHCPCTFVPSNNYIIPNKSEELERFAGIDGTSTYTSGDQKTIKSTRKKNSGKTP
		== = = = =
C6D4 CDR L ₁	30	L-NSRTRK---N
C6-RGD3 CDR L ₁	30	LGRGDLGRLKKN
		= =

interactions between $\alpha\beta$ 8/L-TGF- β , $\alpha\beta$ 8/C6D4, $\alpha\beta$ 8/C6-RGD3

hydrophobic interactions between $\alpha\beta$ 8/L-TGF- β

^aporcine L-TGF- β 1

^bhuman L-TGF- β 1

= conserved

Table S4 C6D4 and C6-RGD3 CDRL1 loop alignment to TGF- β isoforms, related to Fig.2

Primer Name	Sequence
C6-RGD3 CDRL1 loop F	5'-GATCTGGGGCGCCTCAAGAAGAACGCCTTGGCTTGGTACCAGCAG-3'
C6-RGD3 CDRL1 loop R	5'-CTTGAGGCGCCCCAGATCTCCACGGCCGAGCAGACTCTGACTGGATTTG-3'
β 8 I208R F	5' CAGAAGATCTCTGGAAACAGAGATACACC-3'
β 8 I208R R	5'-GAAGTTTGGTTCGACATAATGC-3'
β 8 Y172N F	5'-CAATGCAGTGACAACAATTTAGACTGC-3'
β 8 Y172N R	5'-GCAGTCTAAATTGTTGTCACTGCATTG-3'
β 8 Y172M F	5'-GATTCATAATCAATGCAGTGACATGAATTTAGACTGCATGCC-3'
β 8 Y172M R	5'-GGCATGCAGTCTAAATTCATGTCACTGCATTGATTATGAATC-3'
Y172A F	5'-GATTCATAATCAATGCAGTGACGCCAATTTAGACTGCATGCC-3'
Y172A R	5'-GGCATGCAGTCTAAATTGGCGTCACTGCATTGATTATGAATC-3'
β 6 I183N F	5'-CCCTTGCAAGTAGTAATCCATACTTCTG-3'
β 6 I183N R	5'-CAGAAGTATGGATTACTACTGCAAGGG-3'
Porcine L-TGF- β 1 C4S RGE F	5'-CCGCCGGGGTGAAGTGGCCAC-3'
Porcine L-TGF- β 1 C4S RGE R	5'-GTGGCCAGTTCACCCCGGCGG-3'
Porcine L-TGF- β 1 C4S R249A F	5'-ACCTGCACAGCTCCCGGCACCGCGCAGCCCTGG-3'.
Porcine L-TGF- β 1 C4S R249A R	5'-GTGGCCAGTTCACCCCGGCGG-3'
Human L-TGF- β 1 F	5'-ATGGCCACCCCGCTGG-3'
Human L-TGF- β 1 R	5'-CTCTACTAGTCTCGAGTTATCAGCTGCACTTGCAGGAGCGCAC-3'.
Puromycin cassette F	5'-ATCGTTTCAGACCCACCTCCC-3'
Puromycin cassette R	5'-CTCTGCTTAGCGAATTCGTTAACTGGCACCGGG-3'
Human L-TGF- β 1 R249A F	5'-CACCGCGCAGCCCTGGACACCAAC-3'
Human L-TGF- β 1 R249A R	5'-CCAGGGCTGCGCGGTGCCGGGAG-3'

Table S5 Primer sequences, related to Biologic Resources Table